

**AMENDMENT TO THE CLAIMS**

**Claim 1 (Original):** A medication delivery system capable of communicating and matching prescribed medication data from a first label on a medication container holding the medication and patient data from a second label on a tag adapted to be worn by a patient wherein the first label also containing instruction of delivering the medication, and the medication and patient data being provided in machine readable formats, the medication delivery system comprising:

(a) a medical device in communication with the medication container, the medical device adapted to delivering the medication from the container to the patient, the medical device having a data port for receiving information; and

(b) a handheld computing device having means for reading the prescribed medication data and the patient data and comparing the data to confirm a match between the medication data and patient data, the handheld computing device having a transmitter capable of transmitting the medication delivery instruction from the handheld computing device to the medical device wherein the medical device is adapted to deliver the medication to the patient according to the instructions.

**Claim 2 (Original):** The medication delivery system of Claim 1 wherein the handheld computing device is a personal digital assistant.

**Claim 3 (Original):** The medication delivery system of Claim 1 wherein the machine readable data of the prescribed medication and the instruction of delivering the prescribed medication are coded in a format selected from the group consisting of: linear bar codes, two-dimensional bar codes, printed data encoding technology, radio frequency identification technology, magnetic stripes or tapes, optical character recognition technology, and optical holograms.

Claim 4 (Original): The medication delivery system of Claim 1 wherein the machine readable prescribed medication data and medication delivery instruction are coded in two-dimensional bar codes.

Claim 5 (Original): The medication delivery system of Claim 1 wherein the machine readable patient data is coded in a format selected from the group consisting of: linear bar codes, two-dimensional bar codes, printed data encoding technology, radio frequency identification technology, magnetic stripes or tapes, optical character recognition technology, and optical holograms.

Claim 6 (Original): The medication delivery system of Claim 1 wherein the machine readable patient data is coded in two-dimensional bar codes.

Claim 7 (Original): The medication delivery system of Claim 1 wherein the first label of medication data is a two-dimensional bar code integrated with text.

Claim 8 (Original): The medication delivery system of Claim 1 wherein the second label of patient data is a two-dimensional bar code integrated with text.

Claim 9 (Original): The medication delivery system of Claim 1 wherein the first label of medication data is a radio frequency identification programming integrated with text.

Claim 10 (Original): The medication delivery system of Claim 1 wherein the second label of patient data is a radio frequency identification programming integrated with text.

Claim 11 (Original): The medication delivery system of Claim 1 wherein the means for reading the prescribed medication data, the medication delivery instruction, and patient data is selected

from the group consisting of: bar code scanners, radio frequency identification readers, magnetic stripe or tape readers, and optical readers.

**Claim 12 (Original):** The medication delivery system of Claim 1 wherein the means of reading the prescribed medication data, the medical delivery instruction, and the patient data of the handheld computing device is a two-dimensional bar code scanner.

**Claim 13 (Original):** The medication delivery system of Claim 1 wherein the transmitter of the handheld computing device is an infrared transceiver.

**Claim 14 (Original):** The medication delivery system of Claim 1 wherein the medical device is an electronic infusion pump.

**Claim 15 (Original):** The medication delivery system of Claim 1 wherein the medication delivery device further has an adapter to facilitate the communication between the handheld computing device and the medication delivery device.

**Claim 16 (Original):** A medication delivery system comprising:

- (a) a container holding a medication, the container having a first bar code label in machine readable format containing medication data and a predetermined set of pump instructions for delivering the medication;
- (b) a tag adapted to be worn by a patient, the tag having a second bar code label in machine readable format containing patient data;
- (c) an infusion pump in communication with the medication container, the pump adapted to deliver the medication from the container to the patient via a catheter, the infusion pump having at least one delivery channel, and the pump having a data port for receiving information; and
- (d) a personal digital assistant having a bar code scanner thereon and a data

transmitter thereon, the personal digital assistant configured to scan the first bar code label and the second bar code label and compare data from the scanned labels to confirm a match between the medication data and patient data, the personal digital assistant transmitter capable of transmitting the predetermined set of pumping instructions from the personal digital assistant to the infusion pump wherein the pump is adapted to deliver the medication to the patient according to the instructions.

**Claim 17 (Original):** The medication delivery system of Claim 16 wherein in the container is an IV bag and the medication is an IV drug.

**Claim 18 (Original):** The medication delivery system of Claim 16 wherein the tag containing patient data is a bracelet adapted to be worn by the patient.

**Claim 19 (Original):** The medication delivery system of Claim 16 wherein the machine readable format of the first bar code is a two-dimensional bar code.

**Claim 20 (Original):** The medication delivery system of Claim 16 wherein the machine readable format of the second bar code is a two-dimensional bar code.

**Claim 21 (Original):** The medication delivery system of Claim 16 wherein the first label of medication data is a two-dimensional bar code integrated with text.

**Claim 22 (Original):** The medication delivery system of Claim 16 wherein the second label of patient data is a two-dimensional bar code integrated with text.

**Claim 23 (Original):** The medication delivery system of Claim 16 wherein the bar code scanner of the personal digital assistant is a two-dimensional bar code scanner.

Claim 24 (Original): The medication delivery system of Claim 16 wherein the data transmitter on the personal digital assistant is an infrared transceiver and the data port on the pump for receiving information is an infrared transceiver.

Claim 25 (Original): The medication delivery system of Claim 16 wherein the infusion pump further having an adapter to facilitate the communication between the personal digital assistant and the infusion pump.

Claim 26 (Original): The medication delivery system of Claim 25 wherein the adapter of the infusion pump further providing infrared data communication between the infusion pump and the personal digital assistant.

Claim 27 (Original): The medication delivery system of Claim 16 wherein the delivery channel of the infusion pump has a third label containing channel data identifying the channel, the channel data being in a machine readable format to be scanned by the bar code scanner of the personal digital assistant.

Claim 28 (Original): The medication delivery system of Claim 16 wherein a pharmacy information system generates a print stream containing the medication data and the predetermined set of pump instructions for delivering the medication, and wherein the first bar code label is encoded with the data and instruction derived from the print stream.

Claim 29 (Original): A medication delivery system comprising:

(a) a medication container containing a prescribed medication and a first label containing data on the prescribed medication, and instruction of delivering the prescribed medication, the medication data and medication delivery instruction being provided in machine readable format;

(b) a tag adapted to be worn by a patient, the tag having a second label containing data on the patient, the patient data being provided in machine readable format;

(c) a handheld computing device with:

means for reading the prescribed medication data, the medication delivery

instruction, and the patient data;

means for storing the data; and

means for communicating with other electronic devices; and

(d) an electronic medication delivery device having the means for communicating with the handheld computing device to receive the medication delivery instruction from the handheld device to deliver the prescribed medication in the medication container to the patient via a catheter, the medication delivery device having at least one delivery channel;

wherein the handheld computing device reads and stores the prescribed medication data and the patient data, performs a matching check between the prescribed medication data and the patient data to confirm a match, and communicates the medication delivery instruction to the electronic medication delivery device to deliver the medication to the patient.

Claim 30 (Original): The medication delivery system of Claim 29 wherein the medication container is an IV bag, the prescribed medication is an IV drug.

Claim 31 (Original): The medication delivery system of Claim 29 wherein the medication delivery device is an infusion pump.

Claim 32 (Original): The medication delivery system of Claim 29 wherein the tag containing patient data is a bracelet adapted to be worn by the patient.

Claim 33 (Original): The medication delivery system of Claim 29 wherein the machine readable data of the prescribed medication and the instruction of delivering the prescribed medication are coded in a format selected from the group consisting of: linear bar codes, two-

dimensional bar codes, printed data encoding technology, radio frequency identification technology, magnetic stripes or tapes, optical character recognition technology, and optical holograms.

Claim 34 (Original): The medication delivery system of Claim 29 wherein the machine readable prescribed medication data and medication delivery instruction are coded in two-dimensional bar codes.

Claim 35 (Original): The medication delivery system of Claim 29 wherein the machine readable patient data is coded in a format selected from the group consisting of: linear bar codes, two-dimensional bar codes, printed data encoding technology, radio frequency identification technology, magnetic stripes or tapes, optical character recognition technology, and optical holograms.

Claim 36 (Original): The medication delivery system of Claim 29 wherein the machine readable patient data is coded in two-dimensional bar codes.

Claim 37 (Original): The medication delivery system of Claim 29 wherein the first label and the second label are generated by a software interface application that utilizes the print data stream from a pharmacy information system.

Claim 38 (Original): The medication delivery system of Claim 29 wherein the means of reading the prescribed medication data, the medication delivery instruction, and the patient data of the handheld computing device is selected from the group consisting of: bar code scanners, radio frequency identification readers, magnetic stripe or tape readers, and optical readers.

Claim 39 (Original): The medication delivery system of Claim 29 wherein the means of reading the prescribed medication data, the medical delivery instruction, and the patient data of the handheld computing device is a two-dimensional bar code scanner.

Claim 40 (Original): The medication delivery system of Claim 29 wherein the first label containing medication data is a two-dimensional bar code with integrated text.

Claim 41 (Original): The medication delivery system of Claim 29 wherein the second label containing patient data is a two-dimensional bar code with integrated text.

Claim 42 (Original): The medication delivery system of Claim 29 wherein the first label containing medication data is a radio frequency identification programming with integrated text.

Claim 43 (Original): The medication delivery system of Claim 29 wherein the second label containing patient data is a radio frequency identification with integrated text.

Claim 44 (Original): The medication delivery system of Claim 29 wherein the means for communicating with other electronic devices is by infrared transmission.

Claim 45 (Original): The medication delivery system of Claim 29 wherein the handheld computing device is a personal digital assistant.

Claim 46 (Original): The medication delivery system of Claim 29 wherein the medication delivery device further comprising an adapter to facilitate the communication between the handheld computing device and the medication delivery device.

**Claim 47 (Original):** The medication delivery system of Claim 46 wherein the adapter of the medication delivery device further providing infrared data communication between the medication delivery device and the handheld computing device.

**Claim 48 (Original):** The medication delivery system of Claim 29 wherein the medication delivery device has multiple channels, each channel having a third label containing channel data identifying the channel, the channel data being in a machine readable format to be transmitted to the handheld computing device.

**Claim 49 (Original):** The medication delivery system of Claim 29 wherein the catheter having a fourth label containing catheter data identifying the catheter, the catheter data being in a machine readable format to be transmitted to the handheld computing device.

**Claim 50 (Original):** A medication delivery system capable of communicating and matching prescribed medication data from a first label on a medication container holding the medication and patient data from a second label on a tag adapted to be worn by a patient wherein the first label also containing instruction of delivering the medication, and the data and instruction being provided in machine readable formats, the medication delivery system comprising:

- (a) a handheld computing device with:
  - means for reading the prescribed medication data, medication delivery instruction, and patient data;
  - means for storing the data; and
  - means for communicating with other electronic devices; and
- (b) an electronic medication delivery device to deliver the medication to the patient; wherein the handheld computing device reads the prescribed medication data and the patient data, performs a matching check to confirm a match between the prescribed medication data and the patient data, and communicates the instruction of delivering the prescribed medication to the medication delivery device to deliver the medication to the patient.

Claim 51 (Original): The medication delivery system of Claim 50 wherein the handheld computing device is a personal digital assistant.

Claim 52 (Original): The medication delivery system of Claim 50 wherein the means for reading the prescribed medication data, the medication delivery instruction, and patient data is selected from the group consisting of: bar code scanners, radio frequency identification readers, magnetic stripe or tape readers, and optical readers.

Claim 53 (Original): The medication delivery system of Claim 50 wherein the means of reading the prescribed medication data, the medical delivery instruction, and the patient data of the handheld computing device is a two-dimensional bar code scanner.

Claim 54 (Original): The medication delivery system of Claim 50 wherein the means for communicating with other electronic devices is by infrared transmission.

Claim 55 (Original): The medication delivery system of Claim 50 wherein the medication delivery device is an electronic infusion pump, the electronic infusion pump having at least one delivery channel.

Claim 56 (Original): The medication delivery system of Claim 55 wherein the delivery channel of the electronic infusion pump having a third label containing channel data identifying the channel, the channel data being in a machine readable format to be transmitted to the handheld computing device.

Claim 57 (Original): The medication delivery system of Claim 50 wherein the medication delivery device further having an adapter to facilitate the communication between the handheld computing device and the medication delivery device.

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*Amendment and Reply to Office Action*

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Claim 58 (Original): The medication delivery system of Claim 57 wherein the adapter of the medication delivery device further providing infrared data communication between the medication delivery device and the handheld computing device.

Claims 59-64 (Cancelled)